Principles of Biology
BIOL 101, Summer Session 2 2018
Matthew J. Cooper, Ph.D.

Lecture: Monday-Friday 9:45-11:15am; Genome Sciences Building 010

Instructor: Dr. Matt Cooper (mjcooper@med.unc.edu)

Office Hours: I will be available to meet immediately after class on most days - either in the lobby outside our classroom or in an adjacent room. In addition, you can email or speak with me after class to arrange a meeting in my office in Burnett-Womack 5021

COURSE INFORMATION

Biology 101: Principles of Biology is an introduction to the fundamentals of biology, intended to serve both biology majors and non-majors. The course is divided into four units: (1) Cell Biology, (2) Genetics, (3) Evolution & Ecology, and (4) Anatomy & Physiology. Throughout the course we will distinguish between scientific and non-scientific approaches to knowledge, and will develop skills to evaluate scientific studies.

Summer Session 2018 Course: We will cover the same material in the condensed summer course that we would in a full semester course. As a result, it is very important to spend at least a couple hours each night completing homework and preparing for the next day. Though intense, the summer course can also be an excellent learning experience because the smaller class size allows for lively discussions and a collaborative atmosphere.

Required Text and Required Online Mastering Biology Access: Our text is Campbell Biology, Concepts and Connections, 9th Edition by Reece et al. Alongside this text we will be using the Pearson Modified Mastering Biology web platform for homework and study aids. You are required to purchase access to Modified Mastering Biology, which includes the e-book for Campbell Biology 9th Edition. You can purchase this by visiting [UNC Textbook Lookup]. Purchasing a hard copy of the text book is optional and there are hard-copy books on reserve at the Undergraduate Library. We will also be using Pearson’s Learning Catalytics for in-class assignments. If you purchase your material from somewhere other than the UNC book store, please ensure that access to Learning Catalytics is included.

Preparing for Class: Complete the GRQs and MB homework each night for the following day’s lecture topic (see below for more details) and bring the following items to class each day:

1. Lecture Outlines from Sakai (either printed or on laptop) to assist in taking note-taking. I recommend that you hand write your notes; education research shows that students learn more by handwriting notes, despite the perceived convenience of a laptop or tablet.

2. Extra blank paper for drawings, notes, activities, etc.

3. A mobile device — laptop, phone, or tablet — enabled for UNC Wi-Fi access. Cellular service is not reliable in the classrooms.
CLASS RESOURCES

Sakai: We will rely heavily on the class web site [sakai.unc.edu] for distribution of important resources and class announcements.

- **Resources** such as handouts, lecture slides, additional reading, podcasts, videos, and study guides will be posted on Sakai throughout the course and you are responsible for keeping up with material as it is posted.

- **Communication** regarding student concerns and class news will be posted to Sakai and/or sent via email. It is your responsibility to check it and your UNC email account regularly.

Piazza: In order to become a community that aids each other in the learning process, we will be using the Piazza platform. You may post any questions you have about the course to this site so that they can be answered by me or a fellow student. You may ask general questions about the course, propose study sessions to fellow students, or ask content-specific questions relating to things we’ve discussed in class. *(Note: you are always welcome to send private or personal questions to my email.)* Sign up for piazza by going to [piazza.com/unc/summer2018/biol101]. Piazza can be accessed with a web browser or with mobile device apps. I will take note of students who engage productively in this online forum while assessing participation grades.

Email: To help me respond to your emails more quickly, please include BIOL101 in the subject line. To comply with the Family Educational Rights and Privacy Act (FERPA), I am not allowed to respond to messages that refer to individual students or student progress in the course through non-UNC accounts, phone calls, or other types of electronic media.

Your Classmates: Identifying at least two study partners will serve you well. These classmates should be your go-to people when you have a question after class. Are you confused about an assignment requirement? What pages are you supposed to read for tomorrow? When’s that assignment due? Ask one of your classmates. Write the names and email addresses of three or four classmates:

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ASSIGNMENTS & CLASS ACTIVITIES

Reading and Assignments: Lecture will focus on review and reinforcement of assigned material, therefore assignments should be completed prior to each class time. Each assignment will have Guided Reading Questions (GRQs) associated with a Mastering Biology (MB) assignment of the same name. Begin by reading the assigned text while answering GRQs, and then proceed to the MB homework. In this way, the MB homework should reinforce what you have independently learned from the reading. You are ultimately responsible for information in the guided reading, as well as anything covered during lecture.
• **Assigned Reading:** The specific chapter sections or other media required for each topic are listed in the Course Schedule below. In addition, the reading assignments are listed within each GRQ section.

• **Guided Reading Questions:** GRQs are intended to help you focus and learn independently as you read, watch videos or listen to podcasts. Each GRQ section is named for the lecture topic it covers, and the resources you'll need to answer the questions are listed in the GRQ. These will be uploaded to Sakai periodically for grading (see Course Schedule)

• **Mastering Biology (MB) Homework:** Unless otherwise noted, MB homework assignments will be due every morning at 9:00 a.m. (i.e., you should do homework every afternoon to prepare for the next day’s class). Some assignments will take you as little as 20 minutes and others will take over an hour with the animations and short tutorials interspersed in the homework. Do not count on the Mastering Biology site to give an accurate account of how long an assignment will take — these estimates can be wildly off. **Late homework will receive a 50% deduction,** so be sure to start in a timely manner. Assignments are timestamped by the Mastering Biology site when submitted, so allow a few extra minutes to account for differences in your clock.

• To register for Modified Mastering, visit [http://pearson.com/mastering/] and use the **Course ID: cooper14188**. During the registration process you will enter the access code for Modified Mastering you previously purchased with your text or e-book. Alternatively, if you have not purchased an access code, you will be given the opportunity while registering. Please make sure that your purchase includes access to Learning Catalytics.

**Class Participation:** Most of your class participation credit will come from Learning Catalytics, but completion of in-class assignments and participation in Piazza may also be a part of this grade.

• **Learning Catalytics (LC):** The more you pay attention and actively discuss biology in class, the more successful you will be. As an incentive to be a full participant, about 5% of your grade will come from a platform called Learning Catalytics (accessed through Mastering Biology) that you use through your laptop or smartphone/tablet. You must have your device connected to UNC Wi-Fi — be sure to do this for any devices you might use in class: [http://help.unc.edu/help/connecting-to-the-unc-network-getting-started/]

• How is LC graded? Many questions will be participation only. Some questions throughout the semester will be graded as correct/incorrect. A few points will be dropped for all students to accommodate occasional absence, tech problems, etc.

**Exams:** There will be five exams. Four unit exams will be given during the term, each covering only the material from the previous unit. The final exam will be given on Exam Day 1 (7/30, 8–11 a.m.) along with Unit Exam 4. It will be cumulative, and will be the length of a normal unit exam. The exam format is multiple-choice, and you will be required to provide your own Scantron sheets and #2 pencils (available at UNC Student Stores).
• **Exam Scoring:** Your lowest unit exam score will be dropped. The scores of your three best unit exams and final exam will each account for 20% of your final grade (see Grading Policy).

• **Exam Preparation:** Study GRQs, lecture outlines, Learning Catalytics questions (log in and review), and lecture slides. To succeed in this class, you should take advantage of all reading and homework, and actively engage in all class discussions.

• **Note:** Unit exams can only be made up with prior permission obtained in writing; permission may require that I consult with Department of Biology faculty. Make-up exams will be different than the normal exams, and may involve short answer or essay questions. There will be no make-up for exams given on Exam Day.

**ADDITIONAL POLICIES**

**Digital Etiquette:** This course will require you to use your laptop and/or cell phone during class time. Please be respectful of your classmates and restrict your use of digital devices to course content. Please be respectful of your own learning and realize that those around you will be distracted if you are off-task. If I see that you or your peers are distracted, I will ask you to put your devices away and you may forfeit your ability to earn participation points that day.

**Honor Code:** Academic honesty means that we respect each other and the work that we do; this means we behave with integrity in and out of the classroom, and do not lie, cheat or steal (e.g. using someone else’s work as your own is both stealing and lying). The University of North Carolina at Chapel Hill has had a student-led honor system for over 100 years. It is our responsibility to report any instances of academic dishonesty and violations of the Honor Code. The student-led Honor System is responsible for adjudicating any suspected violations of the Honor Code. All suspected instances of academic dishonesty will be reported to the Honor System and students will receive a zero on the assignment or exam in question. Your full participation and observance of the Honor Code is expected. Please report any violations that you observe. Information, including your responsibilities as a student is outlined in the Instrument of Student Judicial Governance: [https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf](https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf).

**Grading Policy:** Your grade for this course will be determined by four exam scores, homework, and class participation as follows:

- **Exams (4 x 20%):** Scores from three unit exams and the final exam will be combined for a total of 80% of your grade.
- **Assignments (15%):** Assignments include Mastering Biology homework and select GRQs.
- **Class Participation (5%):** Includes participation in Learning Catalytics. Points will be awarded for participation as well as for correct responses.

**Grading Scale:**

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